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Original.

ON THE TREATMENT OF SOME FORMS OF STONE IN THE BLADDER BY PERINEAL LITHOTRITY, WITH A DESCRIPTION OF THE INSTRUMENTS USED.*

BY REGINALD HARRISON, F. R. C. S.,

Surgeon to St. Peter's Hospital, London.

I have recently completed a record of over 400 operations for stone in the male bladder. These figures include instances of almost every recognized method of removing a calculus from this position, and though lithotritry, as I saw practiced by my late friend, Professor Bigelow, of Boston, under the name of litholapaxy, largely predominates, lateral, median and supra-pubic lithotomy, in their various modifications, have from time to time been utilized.

The greater number of persons thus operated upon were male adults up to 82 years of age, though these figures include 56 male children, who for the most part were treated by lateral lithotomy. As showing the safety with which the lateral operation can be practiced in these young subjects I may mention that only one death, or failure to recover completely, occurred, and this was due to chronic pyelitis some weeks after the operation.

The stones removed by me in the course of these 400 operations include almost every variety in known chemical composition, though the hard urates and oxalates were the more frequent. One of the largest specimens of cystic calculus, weighing 1050 grains, now in the

Museum of the Royal College of Surgeons, was successfully removed by lateral lithotomy. Medium sized stones, from half an ounce to half a drachm in weight, were by far the most common, though some larger specimens, up to four ounces, occasionally presented.

These points are referred to incidentally for the purpose of showing that my practice has not been limited to one method of treatment, but has been varied to meet the different conditions under which stone in the bladder has come under my notice.

It may possibly be urged by some, considering the progress lithotritry has made during the present half century, that, save in instances where the stone is of such dimensions as to be beyond the capacity of any lithotrite, no other operation for its removal is now advisable. Such a view might be accepted if lithotritry, pure and simple, were always the entire success immediately and permanently we could desire. Mr. Cadge has pointed out in his Hunterian Lectures before the Royal College of Surgeons (1886) that the number of recurrences after the crushing operation, even in the hands of some of its warmest and most competent advocates, is such as to considerably detract from its completeness.

As in the case of other surgeons engaged in work of this kind I may state in general terms that my mortality has been a gradually decreasing one. Taking my last one hundred cases of stone operated upon by the various methods referred to, and excluding children and males under puberty, my number of deaths following crushing and nine cutting operations did not exceed five per cent. These cases, no doubt, at the present moment represent the

*Read before Surgical Section of International Congress at Rome, April 3, 1894.

best period of my work, and may be regarded as an outcome of the great advances that have been made in the operative treatment of stone in its various directions by Bigelow, Thompson, Cadge, Guyon, Keegan and Freyer, to each of whom we are indebted for something distinctive, in either the method or the application of treatment.

Fully recognizing the work of these distinguished surgeons, I am at the same time disposed to give some prominence to three circumstances which have contributed in no small measure to the results I have arrived at: (1) To the earlier diagnosis of stone which now prevails, and the application of treatment before the calculus has attained any considerable dimensions; (2) To the detection of a stone in the bladder with the sound, being concurrent with its removal; and (3) To a more extended experience in selecting the most appropriate, and therefore safest operation.

The object of this paper, however, is to briefly describe a method of operating which has been found particularly applicable to some exceptional cases, and where the results obtained from it contributed materially to the small mortality of a series of operations which embraces both lithotomy as well as lithotrity.

It is not necessary for me to enter upon the history of perineal lithotrity, and to trace the various modifications which have from time to time been described. The proceeding has been referred to by Dr. Gouley, (a) of New York, in the following words:—"The name of perineal lithotrity was given in 1862, by Professor Dolbeau, of Paris, to an operation completed in one sitting by which the membranous portion of the urethra is opened, the prostate and neck of the bladder dilated, instead of being cut, and a large stone crushed, and the fragments immediately evacuated."

It was with this definition before me that I entered upon the study and practical application of the principles of this operation. I published my first communication (b) on perineal lithotrity some years ago, and I have practiced it in fourteen instances in male adults. In every example the operation was suc-

cessful, recovery being rapid and complete, and I am not aware that recurrence of stone has in any one of these cases followed.

The chief features in connection with the operation I am about to describe are: (1) The mode of obtaining access to the interior of the bladder from the perineum; and (2) The mechanism connected with crushing and evacuating the stone.

From a number of experiments I made on the dead subject as well as from the performance of median cystotomy on the living for various purposes, it seemed unnecessary to do more than to make an opening from the perineum into the membranous urethra at the apex of the prostate, on a grooved staff passed along the urethra, sufficient to admit the introduction of Wheelhouse's small tapering gorget, and subsequently the index finger into the bladder, as for digital exploration, or, as is done in the boutonniere or Cock's operation—more than this is not necessary. In Dolbeau's operation direct access to the bladder was obtained by this route, aided by the use of an expanding instrument by means of which the prostatic urethra and neck of the bladder were dilated. It seemed to me, from some experiments made on the cadaver, that the latter means of dilatation was not only unnecessary, but was open to the objection that, unless used with the greatest care, it was possible to inflict serious damage.

Further, I succeeded in demonstrating that by means of crushing forceps shaped somewhat like the blades of a lithotrite, and not exceeding by actual measurement in circumference that of an ordinary index finger, sufficient power might be provided to crush and assist in evacuating any stone that could be fairly seized in this way. These forceps are provided with a cutting rib within the blades, and the more powerful instruments, as you will see, from the specimens I am showing you, are fitted with a movable screw on the handle. The fragments may subsequently be withdrawn by means of aspirator catheters passed through the wound, or even by the forceps. If care is taken to make the perineal would correspond in size with the evacuating catheters, which should be of about the size of an ordinary in-

(a) "Diseases of the Urinary Organs," 1878.

(b) The "Lancet," September 22, 1888.

dex finger, there is no difficulty in keeping the bladder distended during the necessary manipulations.

The chief points in favor of this operation are these: (1) It enables the operator to crush and evacuate large stones in a short space of time. (2) It is attended with a very small risk to life as compared with other operations where any cutting is done, such as lateral or supra-pubic lithotomy, and is well adapted to old and feeble subjects. In his recent address, Mr. Swinford Edwards (c) shows that the latter operation for large stones has a mortality somewhere about 50 per cent. (3) It permits the operator to wash out the bladder, and any pouches connected with it, more effectually than by the urethra, as the route is shorter and the evacuating catheters employed of much larger calibre. (4) The surgeon can usually ascertain, either by exploration with the finger, or by the introduction of forceps into the bladder, that the viscus is cleared of all debris. (5) It enables the surgeon to deal with certain forms of prostatic outgrowth and obstruction complicated with atomy of the bladder in such a way as to secure not only the removal of the stone, but the restoration of the function of micturition. (6) By the subsequent introduction and temporary retention of a soft rubber drainage-tube states of cystitis due to the retention of urine in pouches and depressions in the bladder wall are either entirely cured, or are permanently improved. To lock up unhealthy ammoniacal urine in bladder that cannot properly empty itself after a lithotomy is to court the formation or recurrence of a phosphatic stone. Hence it is well suited to some cases of recurrent calculus. I have never known the wound to remain unhealed, except in those instances where, for some reason or other, it has been desired to construct a low-level urethra, as in an instance I have recorded elsewhere. (d).

It is well adapted for some cases of stone in the bladder complicated with stricture in the deep urethra, as it enables the surgeon to deal with both at

the same time. Nor does it expose the patient to the risk which may be attendant where lithotomy is performed with a weakened or permanently damaged urethra. Dr. Bazy (e) has also recently illustrated its advantages under these circumstances.

I will conclude this paper with a brief record of three illustrative cases, and show the specimens removed:

(1) A man, 24 years of age, who was cut for stone by a perineal method ten years previously, came under my care in 1888 suffering from a large stone in the bladder and a small perineal fistula, the result of the preceding operation. As I thought it best to try and remove the stone and close the fistula at the same time, I adopted the method I have described, and broke up with the forceps, and extracted a large phosphatic stone weighing nearly three ounces in a few minutes. The fistula tract was doubtless included in the line of section. A drainage tube was introduced into the bladder through the wound. On the fifth day normal urine was discharged through the tube, when the latter was withdrawn and the wound closed soundly in forty-eight hours. The patient was known to be well two years after this operation.

(2) A man, aged 52, came into St. Peter's Hospital in 1893, suffering from calculus and some form of prostatic obstruction. The latter complication requiring attention I selected the perineal method, and in a few minutes, partly with the crushing forceps and partly with the evacuator catheter, I removed over three ounces of very hard urate calculus in addition to a polypoid excrescence of the prostate as large as a good-sized grape. A drainage tube was passed into the bladder through the wound, and the operation was completed without delay; the tube was retained for a week, and on its withdrawal the wound healed in a few days.

(3) The third case was that of a man, aged 62, whom I operated upon in 1890. He had undergone five operations previously by other surgeons for stone, which seemed to be primarily a urate calculus, and subsequently phosphatic. When I saw him another stone had formed within eight months, his bladder

(c) "Medical Press and Circular," October 12, 1892.

(d) "Surgical Disorders of the Urinary Organs," 4th edition, 1893, by Reginald Harrison. Churchill, London.

(e) "La Semaine Medicale," February 17, 1893.

was pouched and almost completely atonic, as he was largely dependent upon his catheter. The state of his bladder, irrespective of the size of the stone, led me to select perineal lithotomy. There was a large post-prostatic pouch containing an ounce calculus, which was readily crushed by the forceps, and removed in a few minutes. I also twisted off a piece of prostatic outgrowth, which seemed to act as a valve. A drainage tube was retained for over three weeks, when the urine being normal it was withdrawn. The wound healed soundly in the course of a few days. The power and function of the bladder has been completely restored, and there has been no recurrence of stone.

I have selected these three cases as illustrating conditions of complication which not unfrequently render lithotomy an imperfect success. The alternative operations of perineal or suprapubic lithotomy, as usually practiced, would, I believe, have exposed the patients to a greater risk than I liked to incur. I therefore selected a proceeding which seems to me, whilst providing a most efficient and convenient means for rapidly removing a stone from the bladder, is, at all events, free from the risks of hemorrhage and shock as not rarely attend the older forms of lithotomy. If a stone could be dealt with as soon as it was retained in the bladder no other operation than lithotomy would ever be practiced, except, perhaps, in some few instances where a calculus is the natural consequence of some diseased condition within the bladder which is capable of being removed.

MEETING OF THE PANCOAST SOCIETY.

(PHOTO-MICROSCOPY.)

(BY T. S. MIDDLETON.)

At a meeting of the Pancoast Society of Anatomical and Clinical Surgery, held at the Medico-Chirurgical College, Philadelphia, April 12, 1894, the subject of "Microscopy and Photo-Microscopy" was discussed.

T. S. Middleton presented and demonstrated before the society and several visiting doctors a microscope of new design, and original. After showing the condition of slides that were several years old, and demonstrating the importance of immediate photography, some of the slides were used in the new

instrument, which magnified the slide to eight inches, and, because of the immense size, it showed at a glance the weakened details due to age. In a microscope this defect would not be so bold.

After a thorough demonstration, the instrument was changed in a few moments to demonstrate the use of the instrument in photography. A small sheet was drawn over a blackboard and on it thrown some of the work done by the instrument, which for detail and definition stands among the finest ever seen. The most important were three or four specimens of developing bone, sections of the stomach and intestines, muscle, kidney and prostate gland, developing teeth, female generative organs, optic nerve and a large number of others. After the exhibition the merits of the instrument were considered, and it was examined, by all present, questions asked and notes made. An explanation of a \$5.45 microscope was given. I consider it of as much importance to the scientific man as to the student to first consider its cost, then its advantage over the high-priced instrument, by being able to see a section with both eyes, and in place of the small eye-piece which gives but a $\frac{1}{8}$ -inch opening. As in the microscope, you can get any section with detail from one inch up to five feet, it being a question of light only. By this explanation I hope to answer the many questions that are continually being asked concerning the instrument, which is now so largely used in all kinds of researches.

On examination it will be seen that anyone can construct this simple instrument. For a general explanation I will say that the funnel is tin, and the plate which takes the place of the eye-piece is common ground glass. The tube is a piece of thin brass pipe, $2\frac{1}{2}$ inches long and 2 inches in diameter, with a society thread cut in the end. A short piece of rack, soldered to the under side, to operate the focal distance. A small pinion and a thumb piece. The balance is of wood. It is necessary to paint the inside of the tube and funnel with a black paint, without any gloss, or what is known as dead black, for a neat finish. I painted the one I now describe all over, which gives it a very neat appearance.

Going into a minute description of the instrument, we take a board 2 feet long,

4 inches wide, 1 inch thick; on its edges screw parallel strips having on their surface bevel edges. This forms a dovetail or slot for the various parts to slide in for adjustment. The funnel is an ordinary funnel with the end off to concentrate the light. I have a strip of tin soldered to the under side to form a foot, and screw it on a piece of wood that has been fitted in the dovetail or slot. Behind this is the slide holder, made of very light wood, secured to a base fitted in the slot. The upright has a hole cut through it about three-quarter inches in diameter, to permit the image and light to pass through. On its face, to hold the slide the same as the stage of the microscope, is two spring brass fingers. Behind this is the brass tube which any instrument maker will furnish. The one I have cost me 45 cents complete. A ring is worked out of a piece of wood. It should not be less than one inch thick. This thickness prevents any tendency to bind. Cut out a small notch for the rack, which also serves to keep the tube from turning. Because of the small pinion that operates the rack it is necessary to cut the ring in half at the bottom of the rack. This is to allow for the cutting of the recess for the pinion and the shaft for thumb piece. This is also fastened to a base piece that is fitted into the slot. Finally, we have the object glass, which is simply a ground glass. Any white material can be used, but from experience I would suggest a piece of ground glass six inches square. The objection to cardboard is that you have the image on but one side, and on the ground glass you have it on both sides. Muslin has the same effect. The holder is constructed of very light wood, and secured to a base which has been fitted into the dovetail or slot.

Thus it will be seen that all the parts are adjustable in the slot, the same as a costly instrument. If at any time you want to produce a section, say two feet square, you slide out the ground glass and holder, tack on the wall a sheet, and place your instrument in such relation as will produce the desired size—thus enabling a class to study at the same time, from the same section. Care must be taken to have the centre of funnel, the hole in the slide holder and lense on a line. The distance from centre line to the board should be about three inches.

The light is a very important feature and from experience with the microscope you appreciate what a good light means. So I suggest that you give this your closest attention. I have seen many forms used in the instrument, from a candle to a "lime light." From my own experience I have a cheap magic lantern with a two-wick lamp, and from it I get splendid results. You use the lantern with the condensers (and not the lenses,) thus you have a powerful light, assisted by the double condensers, and a reflector thrown into the funnel. I saw one at Trenton made with a tin cracker box, having a hole cut in its side on a level with the flame and a strong reflector behind it, which gave good results.

The darker the room the stronger the detail.

The stronger the light thrown into the funnel the stronger the detail.

The lense may be an ordinary low power one. In purchasing, buy it with the privilege of exchanging it. The thread is what is called a society thread, which will fit any lense.

If at any time you desire to photograph your slides, you can do so by removing the ground glass and substituting a small camera without any lense—taking pains to focus very carefully. Put some glycerine on the ground glass and use a good hand glass to assist. Your exposure depends upon the light, which, if strong, expose from $1\frac{1}{2}$ minutes to $2\frac{1}{2}$. A little experience will decide this for you. In "Photo Microscopy" always use the Carbutt-Ortho plate, size $3\frac{1}{4}$ by 4. With this size you have a lantern size, and this make of plate enables you to get the full color values of the stains, blood, fats, etc. Develop with the Hyp-developer.

MOVABLE KIDNEY.*

BY FRED. L. BAKER.

The condition known as movable kidney might be expected to be more common, because this organ is found behind the peritoneal cavity, enclosed in a mass of fatty tissue, and receives no support from the peritoneum like other abdominal organs do. Even the vessels which give support to the kidney are at right angles to the force of gravity when the body is in the erect attitude.

*Abstract of essay read before the Pancoast Society of the Medico-Chirurgical College of Philadelphia.

In some conditions of malnutrition the organ loses its fatty support and becomes more or less movable. This may be limited, as such absorption of the fatty capsule is limited. Again, the continuity of the fatty capsule may be entirely destroyed and the movements of the kidney limited only by the vessels which carry its nutrition and by direct contact with the structure in its immediate relation.

The condition of movable kidney may be studied from these points:

1. The effect upon the organ itself.
2. The effect upon the surrounding structures.
3. The effect upon the central nervous system.

The effect upon the organ is of great importance, for it involves both nutrition and function. When the supporting capsule is removed the organ is swung by the vessels which carry substance for its metabolism, hence the vessels are irritated, they grow in length and lessen in lumen, and nutrition and function are much impaired. The organ continually increases its range of movement and alters its position with every turn of the patient. The kidney may undergo coagulation necrosis from contortion and obliteration of its vessels or may atrophy or become the seat of abscess formation.

In its relation with the surrounding tissues those with which the kidney comes in contact in obedience to the laws of gravitation when the patient is in the upright position concerns us most. The posterior wall of the peritoneum in conjunction with the mesentery and small intestines, the duodenum in relation to the right kidney, and the upper portion of the descending colon with the left, are the structures with which adhesions are apt to occur.

The effect upon the central nervous system is shown by the serious implication of the stomach, which becomes so irritable that not the least portion of food can be retained. This will not seem strange when it is considered that the relation of the renal plexus of the sympathetic with the splanchnic nerves and the solar plexus is most intimate, as well as that with the pneumogastric and spinal nerves of the cerebro-spinal system. Probably no other condition so demonstrates the unity of the entire nervous mechanism as movable kidney.

The etiology of this condition is probably malnutrition. The fat surrounding

and supporting the kidney is of a peculiar kind; peculiar because its function requires a marked degree of firmness, which firmness is insured by making this fat rich in stearine. If from any cause the chemical condition of this substance is changed, it loses its firmness, and the connective tissue is so scanty that the kidney is allowed to move in its fatty capsule, or, the continuity being dissolved, it is absolutely freed.

When motion is limited diagnosis is difficult, and this condition may occasion much unaccounted for suffering. When motion is extensive, diagnosis is easy, because it is a condition of emaciated subjects. The patient may be placed in various positions and the region of the kidney palpated bimanually and the kidney will be found in the most dependent portion.

Regarding the treatment of this condition extirpation is to be considered only when the condition of the patient demands such operation, or when, from a large amount of pus in the urine, abscess of the kidney is evident. The median incision is preferable. Occasionally, when the organ may be of some use to the individual, it may be secured to the muscular walls of the back by opposing the edges of the wound to vivified portions of the organ, so that union by first intention may be obtained and the organ thus secured in position. All necessary antiseptic precaution should be observed.

STRYCHNINE AS AN ANTIDOTE FOR CHLOROFORM POISONING.

Washburn ("Therap. Gaz.," February, 1894) records a case of a patient who had swallowed two ounces of chloroform with suicidal intent being found in the street in a condition of profound narcosis. His pupils were widely dilated and inactive. His respiration was so shallow as to be almost imperceptible, and he had the weak, irregular pulse of the dying man. One-twentieth of a grain of strychnine was injected hypodermically, and artificial respiration applied, with the result that, after a few minutes, the whole aspect of the case changed, the respirations becoming deep and full, and the pulse also improved. After an hour another injection of 1-60 gr. of strychnine was given. Two hours after being called to the case the author was able to communicate with the patient, and to get him to confess the cause of his condition. Recovery was complete, the patient, however, passing through a severe attack of gastritis.

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PHILADELPHIA, APRIL 21, 1894.

DR. J. F. B. TURCK, OF CHICAGO,
ILLS., ON THE ROTATORY GAS-
TRIC-SPONGE FOR PURPOSES
OF DIAGNOSIS AND TREAT-
MENT IN CASES OF FOLLI-
CULAR INFLAMMATION
OF THE STOMACH.

Before the section of internal medicine at the International Medical Congress, recently held in Rome, one of the most remarkable and interesting exhibitions of American progress, enterprise and skill in the science of medicine, was made by another of Chicago's young, rising physicians.

Senn startled the world with his marvelous ingenuity; when, at our American International Medical Congress, he produced his decalcified bone plaster for intestinal anastomoses; but the effect was further heightened and intestinal surgery further simplified by the marvelous device of young Murphy, for immediate anastomoses by the metallic button.

Now, another young man comes forward with a device not for soldering and holding together the various segments and coils of the alimentary canal, but for actually descending into them,

moving about within them, ferreting out morbid conditions and alleviating them.

Dr. Turck's device consists of a long rubber tube within which is a rod made of twisted wire, which has a sponge attached to one end and a winding machine on the other. The tube and moist sponge are swallowed. Now the rod within the tube is put into active rotatory action, by an arrangement not unlike an apple peeler, which communicates a rapid rotatory movement to the sponge, which is now in the stomach. Its action is not unlike the burr of a dental engine. After the sponge has entered the stomach its movement may be distinctly felt with the hand over the epigastrium. Now it may be passed onward almost any distance through the pylorus into the intestine.

The doctor has treated over two hundred cases with it; as a general rule, with usually good results. It appears to be an instrument which in intelligent hands will be of unique service, as a diagnostic aid; and without doubt must be of value in a large number of cases of gastric maladies.

It is certainly one of the most valuable acquisitions in the mechanical surgery of this class of maladies; and in the near future will mark a revolution in the treatment of gastric diseases. Moreover, it undoubtedly has a wider range of application than its inventor intended, and will soon be utilized by surgeons as the instrument of value, in a large diversity of cases.

THAT LIBEL SUIT.

We trust that the editor of the Cincinnati "Lancet-Clinic" will receive full legal exoneration in his libel suit, in which he is defendant. He has taken a stand well founded against dangerous advertising, and should receive the support of every true physician who regards his professional bearing.

We understand that in the lower courts the Justice found the case important enough to bind the defendant over to the Grand Jury. This does not imply a great deal, for it is one of the recourses of lower court justices when suits of this character are presented.

We shall await with interest the proceedings of the Grand Jury in this case.

THE TREATMENT OF NASAL OBSTRUCTIONS.

The following apropos to this subject appeared in the "Medical Times and Hospital Gazette," recently.

"Dr. Spitzer advocates simple measures in the treatment of nasal obstructions. In cases of hypertrophic rhinitis he prefers weak reagents, such as iodine and iodide of potassium, to the ordinary astringents. In severe cases associated with induration he recommends chromic and trichloroacetic acid preceded by the application of cocaine. In this method only small tracts should be taken in hand at each sitting. The galvanic cautery is also applicable with the same precautions. After such treatment he closes the orifice with a cotton wool plug, which is retained for twenty-four hours, and otherwise enjoins rest of the nose. He condemns the modern anxiety to operate on the nose with saws, chisels, etc., which should be resorted to only when absolute necessity exists, owing to the frequently occurring sinus, thromboses and meningitis."

PLASTERS.

We are in receipt of a neatly arranged circular from Johnson Johnson & Co., of New York, with a description of their manufacture of plasters and surgical dressings.

This well-known firm is always at the front in the production of this class of goods. Their large factory at New Brunswick, N. J., affords every facility for turning out the best material in this line. We are particularly struck with the low price of the articles named in the circular price list, which simply means that this enterprising firm intends to meet the times with the best goods at the lowest salable price.

MIGRANINE.

Under the above name, Overlach, in "Deutsche Med. Woch.," describes the properties of a combination of antipyrin with caffeine and citric acid. He considers it a chemical combination of the three substances, and after five years' experience of its action in cases of migraine and other forms of headache he has come to regard it as an almost infallible cure, even in the most obstinate cases. It is useful whether given in

the premonitory stage or after the headache has fully developed, and it is seldom that more than one dose is required. The dose is 1.1 gr., to be taken dissolved in water. This quantity contains only 0.09 gr. of caffeine, or one-sixth of the maximal dose of this substance. It is recommended that the patient rest a while after taking the drug, especially in cases of severe migraine.

LOCAL TUBERCULAR INFECTION.

Legrani describes a case in the *Rev. de Therap. Med. Chir.* The patient pricked himself in the palm with a needle, which had been used three hours previously for an injection of iodoformized gnaïacol on a tuberculous patient. Tubercular gumma followed at the site of the injection.

The pus of phlegmonous sore throat contains strepto and staphylo-cocci. Weidel has isolated in one case coli-bacilli. The presence of this microbe is exceptional in bucco-pharyngeal lesions. The question is, Was the bacillus the primary or secondary agent in the infection?

Correspondence.

THE INTERNATIONAL MEDICAL CONGRESS AT ROME.

From our Special Correspondent.

The International Congress is a success, in spite of chaos, confusion and conveyances. The meetings are held at the Polyclinic, and the cars and omnibuses stop some distance this side of that building.

The carriage rates are outrageous, to Americans, but average about ten to fifteen cents per load of 2 to 4 Italians.

Most of the scientific contributions are good, learned, but rather prosaic, as discussion is difficult if not impossible in a polyglot medical section. There has been little to startle the readers of the "Times and Register," as the articles in that paper have gone over the same lines of thought from almost every point of view. There is the man who operates on every hernia—and the one who doesn't operate at all—and between these extremes is every shade of opinion.

There are fibroids and tumors—and fractures and scurvy—just as in the

meetings at home. Though the medical philosophers of Europe are here it does seem as though the younger men have the honors decidedly on their side. Dr. Bastianelli gave a capital paper on his new gastro-enterostomy by means of the Paquelin cautery—this was a revelation to the men of theories. Dr. Thomas H. Manley, of New York, produced an exhaustive, thorough, yet crisp paper on Spinal Surgery, which made the Americans proud and happy. Dr. Murphy, of Chicago, made the sensation of the surgical section. Dr. Edebahts, of New York, told the technique and results of a method of shortening the round ligaments. This created some comment, and Dr. Douglas H. Stewart, of New York, dropped a little firecracker into the section of obstetrics called "Urinary testing of Puerperal fever." The Americans are nearly 120 in number, and are all armed with good and original work, but many were so late in arriving owing to delayed trains and steamers that their names were called and passed over in their absence. Of course the sections are so crowded that we shall not be able to have them read again. However, their papers will be published in the transactions of the Congress.

The genus gendarme seems to think that all Americans live in Chicago, for we have seen Chicago hotels, Chicago bread, almost everything it is possible to brand Chicago. But when an Englishman or one from the States asks the gendarme a question he shrugs his shoulders, points to the office where there is a French interpreter, and says, "he spik Shecarg."

The poor American is like a ewe lamb among eagles—he pays as he goes, and he does not go far. There are many entertainments for his benefit—free of course to others—but he pays if he goes. Subscription boxes abound in Rome for everything; the last one pasted up was for "Lame horses in Malta."

I am told, but not reading Italian cannot inform myself, there is a fund for the erection of a statue to Malpighi, and a fund for dinners, called banquets, which the visiting members will be obliged to pay for themselves. Of course, at our Congresses at home we have usually given the banquet at the termination of proceedings to our guests, but here the idea is something quite the reverse. In spite of many drawbacks

the Congress is a success. Only as a matter of course America is an honor to Americans, and Italy is so different, in our eyes at least; but one can be sure that the American delegates are fully equal to the task of representing the standing and progress of medical knowledge in the last decade of the nineteenth century.

D. S.

THE AMERICAN MEDICAL ASSOCIATION.

San Francisco is justly proud of her harbor, and since it is probable that the delegates and visitors to the American Medical Association will be given an excursion upon its waters it will be of interest to many to learn something of it beauties. We will imagine we are upon one of the large excursion steamers and are starting upon our day's outing. The usual rush through the gates for the boat at the last moment is over, the inevitable minute-too-late man has been left behind and is sorrowfully wending his way back to his hotel regretting the good time and the free lunch that have departed from him, and the boat with her load of guests has drawn out of the slip into the green bay, and with prow pointing northward is gathering headway for the journey.

It is not yet time for the usual afternoon breeze. The sun is shining bright through a sky that will rival in depth and color and purity of tone the more famous skies of the old world, to the right the green slope of the coast range of mountains, looking blue in the distance, rise gradually from the shore until having reached the sky the vision is interrupted, and the beyond is left to the imagination, while to the left the receding city with its undulating outline is growing gradually less distinct, and its rumble and roar is being replaced by the sound of churning waters from the wheels and the hum of happy voice. On the upper deck and forward is a good position from which to note points of interest.

To the eastward is Goat Island. This was formerly called Yerba Buena; its present name doubtless arose from the fact that during the early forties it was used as a goat pasture. At present it is one of Uncle Sam's possessions. The Oakland and San Francisco ferryboats run just south of this island and many tragedies are said to have occurred near its shores. Occasionally one reads in the papers of "The Demon of Goat Island." If any are curious as to the legend, inquire of some native son or daughter and be enlightened. Alcatraz Island lies to the north. It belongs to the United States and is used as a fort and military prison. It seems too bad to appropriate so bright a spot to such use as the latter, but Government and sentiment are not usually very closely related. Over to the left on the main shore is Fort Mason—commonly called Black Point, while

forther westward is Fort Point, backed by high bluffs that have recently been strongly fortified. The dirt mounds on their summits, covered with waving wild oats, look innocent enough, but hidden in their depths are engines of destruction so placed as to fully command the entrance to the harbor. About equidistant between the forts the Pacific coast headquarters for the army is located. The neat quarters of the officers are almost covered by trailing vines and climbing roses that partly obscure their outline. Soon after we have passed Alcatraz, all eyes will be turned to the westward to drink in the view presented. In the centre, like a mighty river lies the Golden Gate, beyond is the limitless expanse of the Pacific Ocean, to the north the Mission hills rise abruptly from the shore to culminate a few miles away in Mt. Tamalpais, while on the south the gentle slopes of the Presidio, dotted with evergreen trees, lead backward toward the city.

Our boat moves on and new scenes shut this one out, but the impression made will long remain. With a long sweep in toward Saucelits—nestling among the trees—at the mountain base, we have turned to the east, and are steaming along past Belvidere and Tiburn.

Angel Island, that we are now approaching, is of some interest to this company of sightseers. Here is located the quarantine station, and perhaps we will be given an opportunity to land and make inspection, but probably our boat will be headed for Raccoon Straits, through which we will pass and cruise about in the broad bay above.

Here we will have an opportunity to point out Red Rock, Two Brothers, Hen and Chickens, McNear's Landing—the most delightful picnic place on the bay—the Chinese village of shrimp fishers and other places with which we may be familiar.

Our objective point is Mare Island. This is the Government naval repair and supply station for the Pacific Coast. Through the kindness of Surgeon-General Tryon and Surgeon Wood, of Mare Island, we will be permitted to land and inspect all that is of interest.

Many famous old vessels have been refitted here, and perhaps some are lying in the offing now. After having spent an hour at this place we will board our steamer and start on our return.

There yet remains much to be seen, but the sun is reaching over toward the west, and we must hasten or it may be dark before the circuit is complete. We steam back past Vallejo, Port Costa, with its immense grain depots; Berkeley, our State University town; Oakland, the city of churches, and Alameda, the charming residence suburb. It will be of interest as we cross the bay on our way home to notice the Spreckels sugar refinery, the Union Iron works, where have been constructed such war vessels as the Charleston, San Francisco, and the Pacific Mail Steamship docks, where the Chinese coolies were at one time

landed by the thousands. The sun is dipping into the western waters, and as our boat glides into the slip the twinkling lights of the city invite us back to our accustomed duties, refreshed and invigorated by our day's outing, and ready for whatever of entertainment may yet be in store.

R. L. RIGDON, Secy.

Book Notes.

CLINICAL DIAGNOSIS BY ALBERT ABRAMS, M. D. Third edition, revised and enlarged. Published by E. B. Treat, No. 5 Cooper Union, New York, N. Y.

This work opens with an examination of medical cases. Then follow chapters on temperature, examination of respiratory system, examination of the thorax, cough, the examination of the sputum, examination of the heart, arteries and veins, the pulse and the blood, the latter with microscopic examinations. Then follow chapters on the digestive system, genito-urinary organs, the nervous system, and a chapter on parasites and bacteria. It is a very interesting and instructive work.

The book contains 254 pages, and has the characteristic neatness of appearance of the publications of Mr. Treat.

INTERNATIONAL MEDICAL ANNUAL FOR 1894. Price, \$2.75. Published by E. B. Treat, No. 5 Cooper Union, N. Y.

The Medical Annual is in its twelfth yearly issue. It brings before the practitioner, in the best form for rapid reference, every advance made in medical knowledge during the year. The design of the book is to bring the general practitioner into direct communication with those who are advancing the science of medicine. It contains 620 pages, and is a work well worth the price. It is admirably illustrated and contains reports of some very rare cases.

THE MEDICAL ANNUAL AND PRACTITIONERS' INDEX. 1894. Published by John Wright & Co., Bristol, England.

This is the English edition of the above work and contains very similar material. The illustrations are identical.

Medicine.

Under the charge of E. W. BING, M. D., Chester, Pa.

DIABETES.

Extract from contributions to the subject.
(Annals de Medicine.)

The relation of diabetes to pregnancy and accouchment is relatively little known. Loeb (1881) first drew attention to the matter. According to him diabetes in pregnancy is a symptomatic affection—the result of a reflex action on the liver.

In 1882 Duncan distinguished between physiological glycosuria of pregnancy and true diabetes with polyuria and abundant glycosuria.

In 1885 Licorche insisted on the gravity of the prognosis as regards the child when the mother is affected with diabetes. Fry, in 1891, pointed out the relative frequency of diabetes in the puerperal state. Bouchardat thought a diabetic woman could not become pregnant, but Licorche pointed out the fallacy of this opinion and remarked that generally the pregnancy only occurred at the commencement of the disease.

The cause of sterility does not depend on the presence of sugar, but on the accelerations of the mucous membrane of the uterus. It may be accented on the occurrence of pregnancy, and ameliorated after the accouchement.

The disease has a pernicious effect on the progress of pregnancy, and in a third of the cases produces abortion or premature delivery. When pregnancy goes to term the child is often dead and macerated. During labor, dilation is slow and the contraction feeble. During the lying in, glycosuria often disappears. In serious cases debility occurs with collapse, or coma, as an ending. Now, as to the influence of pregnancy over diabetes.

The aggravation due to pregnancy is generally admitted; the condition often becomes acute. The glycosuria increases, also polyphagia and polydipsia. Emaciation progresses rapidly, and the woman may have a pulmonary or cerebral complication. In a few rare cases diabetes is not aggravated by pregnancy.

It is not always seen before the occurrence, but may manifest itself during its course, generally about the 6th or 7th month, and at the end of several pregnancies.

The minor symptoms frequently fail in attracting attention, and diabetes is not recognized.

E. W. B.

FLATULENCE.

(Dujardin Beaumetz.)

This condition is distinguished from tympanites, as follows: In flatulence the gases pass off from the intestines; in tympanites they remain; again, intestinal flatulence must be distinguished from stomachal flatulency. The following relates to the intestinal variety.

Nervous affections hold a prominent place in the production of this condition, hysteria notably so. Foods, such as milk and the starchy substances, but the greatest factor is defective biliary secretion. Bile arrests fermentation, and when the secretion is interfered with gases are produced.

—Prog. Med.

The point of treatment in non-compensating mitral diseases is, according to Beaumetz, "to give back to the heart its contractility and return to their normal relations the respective tensions of the arterial and venous systems."

—Annals de Med.
E. W. B.

CHOREA—ITS TREATMENT.

DUJARDIN BEAUMETZ.

A glance over the numerous methods of treatment for this disorder is sufficient to show the confusion which exists, therapeutically, on the subject.

This results from the fact that chorea is varied in its manifestations, and, treatment successful in one case, fails in another. Therefore, the first requisite is to establish the diagnosis.

To chronic chorea has been added the mixture of athetosis and chorea, which has been called the athetoso-choreic symptom, also hereditary cerebellar ataxia. All the choreic movements of chronic character present an almost invariable incurability; these may be dismissed, and the study of acute chorea (common chorea, or chorea of Lydenam) taken up. Here again we find varieties. First, the origin of this chorea allows of dividing it into two large chief groups—that of rheumatic origin,

and that of hysterical nature. These may both, or either, occur in childhood, and by their co-existence render treatment difficult, and in addition to this the disease, having periods of increasing stationary, and declining stages, many cases of success or failure in treatment are due to the stage in which they happen to be.

Chorea may take on variations so different from the classic description (such as the paralytic variety) as to be difficult of recognition. What is to be done in those different varieties?

The part which these different factors play must be taken into account—the stage of evolution and the clinical form under notice.

For the rheumatic variety or allied cases the salicylates are advised, except that of soda, which has in the majority of cases proved a failure. Antipyrine seems to give better results.

In the hysterical variety bromides succeed best. Exalgine has proved serviceable. The failure of salicylate of soda in chorea, even of rheumatic origin, is due probably to the fact that, when the rheumatic poison attacks the cord or its membranes, salicylic acid treatment most frequently fails.

In resume, in rheumatic chorea antipyrine should be used, and the dose should be at least sixty grains per day. If the treatment be during the declining stage success is most probable in from fifteen to twenty days. In grave cases powerful hypnotics are required, which, by prolonging sleep, hinder the development of the choreic movements.

To the internal means external treatment must be added, such as douches, massage, gymnastics, etc. The co-existence of endocarditis should always be looked for, and the above means used in the declining stage.

For the hysterical variety the treatment is quite different. It attacks by preference the female sex. The typical signs are generally present, but there is never any heart complication. Bromides and hydrotherapy are the most useful agents. Frequently a tonic is also required and in these cases arsenic is useful, given in conjunction with the bromides and douches or the wet pack. Ether sprayed along the spine has been recommended by Lubleski.

In the paralytic variety bromides should be avoided; here the wet pack is advantageous.

Alimentation must be carefully carried out, and food easily masticated and digested is required (metal dishes, goblets, etc., should be used). The skin must be kept active.

—Bulle de Therap. E. W. B.

Gregori, Jr., has written a work entitled "Contribution to the Study of Central Hyperthermia, Consecutive to Lesions of the Cerebro-Spinal axis, particularly to Lesions of the Brain."

The book is at once a clinical and experimental study founded on observations comprising hemorrhages and wounds of the brain and spinal injury. The questions he endeavors to solve are these:

1. Does an immediate relation of cause and effect exist between certain non-infectious affections of the nerve centres and the increase of temperature which often accompanies them?

2. Are there iatrogenic cerebral thermic centres?

Clinically, the significance of elevated temperatures, observed in epilepsy or hysteria, being questionable, since the anatomical cause which they reveal is in doubt, the author was limited to mechanical lesions of the cerebro-spinal axis. To reply affirmatively to the first question it was necessary to show elevation of the temperature in conditions such that all supposition of infection or secondary poisoning could be avoided.

This appears to have been done in the observations he makes—that hyperthermia may appear very rapidly in from 5 to 6 hours after the receipt of the injury, and that it is not explainable by inflammation either in the nerve centres or the viscera; that it cannot be imputed to the absorption of septic matter from the central wound.

Experiments confirm this view. They prove that hyperthermia can be produced in 3 hours after a central puncture made antiseptically.

On the other hand these experiments, which number 70, do not agree with those of other observers, who have described thermic centres in the brain. They indicate clearly, it is true, that lesions of the latero-ventricular region are alone capable in the rabbit of determining an elevation of the rectal temperature, but they do not admit of attributing a thermogenic influence special to these regions, in particular (the optic thalami, corpus callosum septum luidum, etc.). We must conclude that there exists a reflex thermic action transmitted to the bulb and the cord by the excitement of the ventricular walls.

—Bull. de l'Acad. de Med.

Therapeutics.

Under the charge of LOUIS LEWIS, M. R. C. S., Philadelphia.

DIPHTHERIA ANTITOXIN SOLUTION.

It has been demonstrated by the investigations of Hericourt and Richet, and especially by the researches of Behring, that substances are present in the blood of animals protected against a certain infectious disease by artificial means, which, if transported to other animals, render them likewise immune. Whilst in most infectious diseases the protection afforded by inoculation is most probably due to certain cellular changes, in tetanus and in diphtheria the specific poison of the disease is rendered innocuous by the substances occurring in the blood of immune animals; these substances have such a direct action that they have a remedial effect even when employed after symptoms of the disease have appeared.

Behring proved that the quantity of active substance in the blood serum depends entirely upon the degree of immunity artificially acquired by the animal yielding the blood, or rather upon the number and intensity of the inoculations, which the animal has withstood without harm. Further, it is known, especially from the researches of Tizzoni on tetanus, that the selection of the species of animal is most important.

In November, 1892, Aronson reported in the Berlin Medical Society, simultaneously with Wernicke, that, by the treatment of dogs very susceptible to diphtheria, he had obtained a serum which contained the substances conferring immunity in such a state of concentration as to be employed in rendering children threatened with diphtheria immune. By the subsequent researches of Aronson, Behring and Wernicke, a further development of the protective value of the serum has been effected. All these authors have reported obtaining more active antitoxine solutions.

The successful employment of antitoxine solutions in communicating immunity to mankind, and especially for remedial purposes, would be attained as soon as it was possible to obtain more concentrated solutions, higher protective value, and, above all, sufficient quantities of antitoxine. For this purpose we have made suitable arrangements, erecting a bacteriological department to our establishment under the superintendence of Dr. Aronson and providing an extensive stock of cattle, so that we are now in the position to be able to supply sufficient quantities of antitoxine solution.

By improving the technical methods of immunization and by new methods of concentration we have succeeded in bringing the protective value of antitoxine solutions to a hitherto unattained height.

The antitoxine solution brought into commerce by us corresponds to about twenty times the strength of the so-called Behring normal serum. Immunity against diphtheria is perfectly se-

cured to children and adults by a single injection of 1 c.c., or to smaller children of $\frac{1}{2}$ c.c., by means of a sterilized syringe.

The estimation of the value of a diphtheria antitoxine solution can be best effected by Behring and Ehrlich's method, by which the minimum quantity required to neutralize a definite quantity of diphtheritic poison is determined.

Guinea-pigs, which are very susceptible to diphtheria, are selected for experiment, those animals weighing from 300 to 400 grams being preferred. The quantity of diphtheritic poison is chosen which will kill control animals of equal weight in 40 to 46 hours, animals weighing 500 grams in 48 to 52 hours and even guinea-pigs of large size (650 to 700 grams) in about 60 hours.

Definite quantities of the antitoxine solution to be tested are added to the dose of diphtheria poison* described above, the mixture injected into guinea-pigs and the minimum quantity of antitoxine solution noted which is required to be added to the diphtheria poison in order not only to save the life of the animal, but to prevent any local reaction.

The diphtheria antitoxine solution brought into commerce by the Chemische Fabrik (vormals E. Schering) is tested in this way, and it is guaranteed that 0.005 c.c. suffices to neutralize the quantity of diphtheria poison above described as determined by the method given. The percentage of antitoxine corresponds, as already mentioned, to twenty times that in Behring's normal serum.

Whilst the blood serum itself, if preserved in a suitable manner and injected in small quantities, is never dangerous to employ, yet it often causes pain, reddening and slight infiltration at the place of injection.

Diphtheria Antitoxine Solution Schering, standardized for immunization purposes, is a limpid, clear liquid and contains one or at most one and a half per cent. albumen. It is mixed with 0.2 per cent. Trikresol, which addition, owing to the small proportion of easily decomposed organic substances in the antitoxine solution, suffices to keep it for an unlimited period. The injection not only causes no general symptoms of disturbance in the system, but also produces no local reaction and no pain at the point of injection. The protection afforded is immediate and is effective even at the incubation stage of the disease.

By a new and patented method discovered by Dr. Aronson an antitoxine is also prepared in solid form which is 400 times stronger than the above solution and will shortly find employment as a remedial agent.

* A solution of diphtheria poison is most simply prepared by filtration of an old sterilized broth cultivation of diphtheria and preserved by the addition of 0.3 per cent. Trikresol.

German Notes.

Translated by ADOLPH MEYER, M. D., Chicago.

EARLY DIAGNOSIS OF MIDDLE EAR DISEASE.

Dr. Okunjew announces a method by which he made an early diagnosis of affections of the mastoid process in middle-ear disease, where there seemed to be no other indication but the character of the fever. He found a decrease in the conduction of sounds when he put the tuning-fork on the vertex of the patient, and, at the same time, auscultated the mastoid process. He communicates two histories in which this symptom gave the indication for operative interference.

—Centralbe f. Chirurgie, 1894. p. 200.

DESTRUCTION OF THE HYPOPHYSIS.

Vassale and Sacchi report on the consequences of the destruction of the hypophysis. They destroyed the gland in 40 animals, and succeeded in keeping 18 with complete destruction alive. The symptoms were depression, convulsions, disorders of appetite; sometimes polyuria. Death came on under convulsions as a rule. The hypophysis belongs to the group of those cells destruction of which is followed by the accumulation of poisonous substances in the body.

—Chil. f. Chirurgie, 1894. p. 203.

MASSAGE IN TYPHOID FEVER.

Dr. Smirnow used massage in cases of typhoid fever where oedema of the lungs and of the brain were threatening, and also for passive hyperemia of the lungs. He elevated the upper part of the body and rubbed with circular movements the temples, the face and the lateral parts of the neck; then used the tapotement of these parts and made rubbing movements with the palm of the hand from forehead and temples over the cheek and the neck in order to accelerate the current of the venous blood of the skin of the head into the great veins.

After this he has the patient lie on his side and make circular movements over one-half of the thorax, and then he rubs the intercostal spaces from the vertebral column to the sternum, pass-

ing over them four or six times. Finally, he adds massage of the abdomen and of the lower extremities.

The whole takes from 15 to 20 minutes.

The venous stagnation was rapidly reduced; the symptoms of oedema of lungs and brain quickly disappeared; the respiration became deeper, the pulse fuller and less frequent, and the consciousness clearer.

Where there is degeneration of the heart muscle little is to be expected from any method.

—Int. kl. Rundschau.

GUAJACOL IN DIABETES.

Dr. Clemens, Frankfurt, reports on the favorable results which he has obtained with guajacol in diabetes. After only one week the sugar began to diminish in the urine. For an experiment, patients who had taken guajacol for two or four weeks took food with sugar. The latter did not appear in the urine.

Guajacol has a remarkably good effect on polyuria. In many cases the quantity of the urine was reduced to one-half within one week.

Besides these results improvement of the general health was obtained.

Chemically pure guajacol was given three times a day, six to ten drops in milk or in cod-liver oil after the meals.

—Therap. Blatter.

DULCIN.

Aldehoff (Therap. Monatsh) refers to the new substance "dulcin," which, possessing 200 times the sweetness of sugar, has been recommended as a substitute for it. Chemically it is a paraphenetol carbamid, and, as compared with saccharin, the bitter after-taste is wanting. However, the author disputes the indifferent action ascribed to it by other authors. Having administered 15 grains daily to dogs, in order to test its innocuousness, he already, after a few days observed constitutional disturbances, such as vomiting, anorexia, etc. The most remarkable change, however, appeared in the urine, which became dark and frothy, as in icterus, no spectroscopic proof being, however, as yet present. Jaundice, nevertheless, set in completely in the mucous membrane, etc., the faeces, however, preserving their color. Death occurred in three weeks with symptoms of acute jaundice, and the author advises the cautious use of dulcin. He considers its unfavorable action remarkable in view of the affinity to phenacetin.

Ophthalmology.

Under the Charge of J. D. TENNEY, M. D., 2 Commonwealth Ave., Boston.

TEMPORARY BLINDNESS.

In an article with the above heading in the "Times and Register" some months ago, the writer gave an account of the case of a young lady whose right eye was filled with small pieces of shattered glass, which remained in the eye two weeks before their presence was discovered. After 36 pieces had been removed, she had repeated attacks of blindness, lasting several days at a time, when the eye could only see 20-cc. Between times she could see 20-xx.

A number of observers have seen cases of this form of blindness in long-continued blepharospasm; but there was no such symptom in this case.

The only way to account for the blindness is to suppose that the retinal circulation was obstructed through reflex influence. The lower lid is red and swollen up to the present time. No remedies have any effect upon the conjunctivitis, which seems to indicate that powdered glass is still present in the lid. The attacks of blindness still come and go. So far as we know, this is a new form of reflex disturbance from irritation in the lid.

J. A. T.

PURULENT OPHTHALMIA.

The writer was recently called in consultation to see a case of this kind, with a peculiar history.

The patient, a man of about 50 years old, married, had an attack last May of hemiplegia on the right side, with paralysis of the facial nerve on the left. The left orbicularis muscle was affected, so the eye remained open, unless it was bandaged. Sensation in the right arm and leg was diminished, but not destroyed. He has been able to walk about the house a little, with assistance, but has not been out of the house for ten months.

The only members of the family besides the patient and his wife are his son and his young wife, and their little daughter, about 4 years old.

About three months ago the paralyzed

man had an attack of purulent ophthalmia in the left eye. The chymosis of the conjunctiva was so great that it overlapped the cornea, making it well-nigh impossible to treat the corneal margin. The formation of pus was profuse, as is usual in such cases. In spite of lotions, the application of bichloride solutions, and nitrate of silver, abscess of the cornea resulted, with perforation, and prolapse of the iris.

After the conjunctiva began to clear up an irregular practitioner, a friend of the family, was called in, who said that in a practice of forty-two years this was the second case of melanosis that he had seen, and that the eye must be removed immediately. The family were not satisfied, hence the consultation, at the suggestion of the family physician.

There was nothing to be said, except that the diagnosis made by their physician was correct, and that he had done everything possible to save the eye. At the time of the consultation there had been no pain in the eye for a month, and the conjunctiva was clearing up. The patient was advised to hold on to his eye, but was told that he would never see with it again.

The crossed paralysis points to a lesion in the pons varolii. It is impossible to find any history of syphilis, or any trace of specific contagion in the affected eye. Of course, the eye was infected by specific germs from some source.

J. A. T.

OCULAR MALARIA.

It is now a well recognized fact that the structures of the eye, especially the cornea and conjunctiva, are subject to malarial affections, periodical in character, differing from the usual affections of these parts, but involving actual tissue change, and amenable to quinine or other anti-malarial treatment. Some ulceration or abrasion of the corneal epithelium may occur, or intra-ocular hemorrhage during the cold stage of a paroxysm.

Miscellany.

USE OF COCAINE IN SMALL-POX.

The author reaches the following conclusions:

1. Cocaine given at the commencement of the disease will completely stop the development of the eruption.
2. If administered after the eruption has appeared, the confluence or hemorrhagic forms change to the discrete.
3. Sometimes while cocaine has been administered from the beginning the pustules become horny and rapidly dry up.
4. It prevents suppuration.
5. To obtain good results the drug must be given at the commencement, and kept up during the whole duration of the disease.

The doses are not mentioned.

COPY.

T. D. Finck, M. D., Kentucky School of Medicine, Louisville, says:

"I am convinced there is no remedy so useful and attended with such satisfactory results in the treatment of melancholia, with vasomotor disturbances, anemic headaches, emotional distress and active delusions of apprehension and distrust, as antikamnia. It also increases the appetite and arterial tension, as well as being particularly serviceable in relieving the persistent headache which accompanies nervous asthenia.

"As an antiseptic and antipyretic and antiperiodic, it is good—nothing better. It is especially beneficial in spasmodic asthenia, in hay fever, in whooping cough, in headaches, particularly of the nervous variety; also that from disorders of the digestive organs, or from the various neuroses.

"In mild hysteroid affections, in the various neuralgias, particularly ovarian, in the nervous tremor so often seen in confirmed drunkards, also in delirium tremens, it is of particular service.

"The pain of locomotor ataxia yields to treatment with antikamnia in a remarkable degree, its analgesic power being of a peculiar kind, in that it will relieve painful affections due to pathological conditions of the peripheral nerves, as neuritis, etc.; also lumbago, sciatica and myalgia.

"When pain is the prominent symptom it is a desideratum, as its province is relief of pain in any and every form. And, best of all, there is no danger of morphinism, no nausea nor malaise, so common with opium and its preparations."

—Cincinnati Lancet Clinic.

Prescriptions.

FOR INFLAMED PILES.

R	Ext. opil pulv.....	gram. 60
	Ext. stramonil pulv.....	1 80
	Acid tannic.....	1 20
	Ung. Hydrarg.....	3 60
	Lanolin gs. ft.....	30

This ointment applied to inflamed external piles acts very favorable and quickly.

—Bing.

FOR EXTERNAL PILES.

R	Pulv. plumbi acet.....	gram. 1
	Pulv. opil.....	1 20
	Pulv. Gallac.....	a a 1 20
	Ung. Picis Liquid.....	a a 1 5
	Ung. Petrolei.....	a a 1 5
	Ft. ung.	

Apply a piece about the size of a bean, night and morning.

(This is a prescription of an old Philadelphia physician, and never fails to relieve.)

—Bing.

A COUGH SYRUP.

R	Morph. sulph.....	gram. 106
	Vin. antimonil.....	8
	Sp. aeth, nitr.....	12
	Syr. scillae.....	30
	Syr. pruni vig. q. s.....	120

Sig. Dessertspoonful every three hours. (This is another from same physician, and is excellent.)

—Bing.

FOR CHRONIC ECZEMA.

R	Alcoholic tinct, male-fern.....	gram. 30
	Alcohol (rect.).....	15
	Tinct. myrrh.....	4
	Powd. opium.....	4

For external use, by bathing the parts twice a day, after removing crusts, etc.

FOR IRRITABLE BLADDER.

R	Benzole acid.....	gram. 4
	Borax.....	4 5
	Water.....	120

Sig. Dose. Three large spoonfuls a day. Rapidly relieves the frequent desire for urination.

FOR INFLAMED PILES.

After each stool the patient injects himself (with this solution .08 c. gms. of sublimate to a litre of water), using each time 200 grammes, then introduces into the rectum a piece of absorbent cotton, carrying the following ointment, which may be used several times a day.

R	Lanoline.....	grams. 50
	Vaseline.....	20
	Distilled water.....	30

CIRRHOISIS OF LIVER.

Calomel with digitalis is recommended, in cirrhosis of the liver, by Dr. Liebrich.

Calomel.
Digitalis aa. 0.10 gram.

Ft. one capsule.

Sig. Three such to be taken during the day.

—Bull de Therap.